

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) ~~[[A]]~~ An isolated nucleic acid ~~molecule~~ encoding ~~the~~ a human dystrophin-related polypeptide Drop1 or ~~[[a]]~~ an isolated polypeptide exhibiting a biological property of Drop1, ~~which is~~ wherein the nucleic acid:
 - (a) ~~a nucleic acid molecule encoding a Drop1 polypeptide that consists of~~ encodes the amino acid sequence ~~as depicted in Figure 10 in SEQ ID NO:30;~~
 - (b) ~~a nucleic acid molecule consisting of~~ consists of the nucleotide sequence ~~as depicted in Figure 6B of any of SEQ ID NOS:9-29;~~
 - (c) ~~a nucleic acid molecule the~~ consists of a nucleotide sequence ~~of which differs from the sequence of a nucleic acid molecule of (a) or (b) due to the degeneracy of the genetic code; or~~
 - (d) ~~a nucleic acid molecule~~ consists of a nucleotide sequence complementary to the ~~nucleic acid molecule~~ sequence specified in ~~(a) to (b) or (c).~~
2. (Currently Amended) A recombinant vector ~~containing~~ comprising the nucleic acid molecule of claim 1.
3. (Currently Amended) The recombinant vector of claim 2 wherein the nucleic acid molecule is operatively linked to one or more regulatory elements allowing transcription and synthesis of a translatable RNA in a prokaryotic ~~[[and/]]~~ or eukaryotic host cell~~[[s]]~~.
4. (Currently Amended) A recombinant host cell which contains the recombinant vector of claim 2 ~~or 3~~.
5. (Currently Amended) The recombinant host cell of claim 4 or 35, which is a mammalian cell, a bacterial cell, an insect cell or a yeast cell.

6. (Original) A non-human transgenic animal characterized by loss of Drop-1 function.
7. (Currently Amended) The transgenic non-human animal of claim 6 ~~further~~ comprising at least one inactivated wild type allele of the corresponding Drop1 encoding gene.
8. (Currently Amended) ~~[[A]]~~ An isolated polypeptide ~~exhibiting a biological property of the human dystrophin-related polypeptide Drop1 or the related polypeptide which is encoded by a nucleic acid molecule of claim 1.~~
9. (Currently Amended) A method of making a polypeptide, ~~exhibiting a biological property of the human dystrophin-related polypeptide Drop1~~ comprising:
 - (a) culturing the recombinant host cell of claim 4 ~~or 5~~ under conditions such that ~~said the~~ the polypeptide is expressed; and
 - (b) recovering ~~said the~~ the polypeptide.
10. (Currently Amended) A polypeptide ~~produced~~ made by the method of claim 9.
11. (Currently Amended) An antibody that binds ~~specifically~~ to the polypeptide of claim 8 ~~or 10~~.
12. (Currently Amended) The nucleic acid ~~molecule~~ of claim 1, ~~the polypeptide of claim 8 or 10,~~ ~~or the antibody of claim 11~~ which is detectably labeled.
13. (Currently Amended) The nucleic acid ~~molecule, the polypeptide or the antibody~~ of claim 12, wherein the label ~~is~~ comprises a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, or an enzyme.
14. (Currently Amended) A method for identifying ~~activators/agonists~~ an activator of ~~the a~~ human dystrophin-related polypeptide Drop1 comprising ~~the steps of:~~
 - (a) incubating a candidate compound with a polypeptide of claim 8 ~~or 10~~;
 - (b) assaying for a biological activity of the polypeptide; and

(c) determining if a biological activity of ~~said~~ the polypeptide has been altered relative to that of the polypeptide when not being incubated with the candidate compound.

15. (Currently Amended) A pharmaceutical composition comprising:

~~(A) a nucleic acid molecule comprising~~

(a) a nucleic acid ~~molecule~~ encoding a Drop1 polypeptide that comprises the amino acid sequence as depicted in ~~Figure 10~~ SEQ ID NO:30;

(b) a nucleic acid ~~molecule~~ comprising the nucleotide sequence as depicted in ~~Figure 6B~~ of any of SEQ ID NOS:9-29;

(c) a nucleic acid ~~molecule~~ encoding a polypeptide the amino acid sequence of which shows at least 65% ~~identity~~ identity to the amino acid sequence of the polypeptide encoded by a nucleic acid ~~molecule~~ specified in (a) or (b);

(d) a nucleic acid, ~~molecule~~ the sequence of which differs from the sequence of a nucleic acid molecule of (a) to (c) due to the degeneracy of the genetic code;

(e) a nucleic acid ~~molecule~~, which represents a fragment of a nucleic acid ~~molecule~~ specified in (a) to (d); or

(f) a nucleic acid ~~molecule~~ complementary to the nucleic acid molecule specified in (a) to (e),

~~[[(B) a]]~~ (g) an isolated polypeptide exhibiting a biological property of the human dystrophin-related polypeptide Drop1 or the related polypeptide which is encoded by a nucleic acid molecule of [[(A)]] (a) to (f) above;

~~[[(C)]]~~ (h) a recombinant vector ~~containing~~ comprising the nucleic acid molecule of [[(A)]] (a) to (f) above; or

~~[[(D)]]~~ (i) an antibody that binds ~~specifically~~ to the polypeptide as ~~defined under (B)~~ of (g) above. [[,]]

and

optionally a pharmaceutically acceptable excipient, diluent or carrier.

16. (Canceled)

17. (Currently Amended) A diagnostic kit or array useful for the detection [[and/]] or characterization of a tumor or a predisposition to such a tumor, ~~containing~~ comprising a nucleic acid molecule as defined in claim 15, a polypeptide as defined in claim 15 or an antibody as defined in claim 15.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (New) A method of making a polypeptide, comprising:

- (a) culturing the recombinant host cell of claim 35 under conditions such that the polypeptide is expressed; and
- (b) recovering the polypeptide.

22. (New) A polypeptide made by the method of claim 21.

23. (New) An antibody that binds to the polypeptide of claim 22.

24. (New) An antibody that binds to the polypeptide of claim 10.

25. (New) A method for identifying an activator of a human dystrophin-related polypeptide Drop1 comprising:

- (a) incubating a candidate compound with a polypeptide of claim 22;
- (b) assaying for a biological activity of the polypeptide; and
- (c) determining if a biological activity of the polypeptide has been altered relative to that of the polypeptide when not being incubated with the candidate compound.

26. (New) A method for identifying an activator of a human dystrophin-related polypeptide

Drop1 comprising:

- (a) incubating a candidate compound with a polypeptide of claim 10;
- (b) assaying for a biological activity of the polypeptide; and
- (c) determining if a biological activity of the polypeptide has been altered relative to that of the polypeptide when not being incubated with the candidate compound.

27. (New) A method for treating a cancer comprising administering to a subject in need thereof an effective amount of a nucleic acid molecule as defined in claim 15.

28. (New) A method for treating a cancer comprising administering to a subject in need thereof an effective amount of a polypeptide as defined in claim 15.

29. (New) A method for treating a cancer comprising administering to a subject in need thereof an effective amount of a recombinant vector as defined in claim 15.

30. (New) A method for treating a cancer comprising administering to a subject in need thereof an effective amount of an antibody as defined in claim 15.

31. (New) A method for treating a cancer comprising administering to a subject in need thereof an effective amount of an activator/agonist obtainable by the method of claim 14, 25 or 26.

32. (New) A method for diagnosing and/or characterizing a tumor or a predisposition to such tumor comprising determining whether Drop1 gene expression is downregulated in the tumor compared to benign tissue, wherein downregulation of the Drop1 gene indicates malignant disease in the tumor or predisposition to a malignant tumor.

33. (New) The method of claim 32, wherein the tumor is an ovarian, mammary, stomach, kidney, thyroid, cervical, pancreas, testis or lung carcinoma.

34. (New) A method for treating a cancer comprising administering to a subject in need thereof an effective amount of the vector of claim 2.

35. (New) A recombinant host cell which contains the recombinant vector of claim 3.

36. (New) The polypeptide of claim 8, 10 or 22, which is detectably labeled.

37. (New) The polypeptide of claim 36, wherein the label comprises a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, or an enzyme.

38. (New) The antibody of claim 11, 23 or 24, which is detectably labeled.

39. (New) The antibody of claim 38, wherein the label comprises a radioisotope, a bioluminescent compound, a chemiluminescent compound, a fluorescent compound, a metal chelate, or an enzyme.